

REMARKS

Status of Claims

Claims 41 and 45-47 are in the present application. Claims 1-3, 7, 10-14, 16, 18, and 27-28 are withdrawn pursuant to a restriction requirement. Claims 4-6, 8-9, 15, 17, 19-26, 29-40 and 42-44 are cancelled. Claim 41 is amended to present the claimed subject matter in a preferred form. Claims 45 and 47 are amended to provide greater internal claim consistency by changing the term “composite” to “laminate.” No new matter is introduced.

Claim 41 is amended to recite a vacuum formed and vacuum laminated material consisting of a bonded carded nonwoven fibrous web thermally bonded to a vacuum formed apertured film to form a unified structure. The unified structure has been activation stretched by passing the unified structure through a nip formed between intermeshing gears to stretch the unified structure and increase the porosity of the nonwoven fibrous web and create access areas in the nonwoven fibrous web. The surface of the film is exposed through the access areas. The vacuum formed apertured film is made from a thermoplastic polymer selected from the group consisting of polyethylene, polypropylene, nylon, and ethylene vinyl acetate.

The subject matter of claim 41 is fully supported by the specification and does not add new matter. In particular, vacuum formed apertured film (i.e., a film having apertures formed by application of vacuum) is mentioned at paragraphs [0032]-[0036] and in claim 11. Bonded carded nonwoven fibrous webs are disclosed in paragraphs [0022] and [0045]. The claims are limited (by virtue of the language “consisting of”) to laminates having one film and one nonwoven web. Support for this limitation is found in the examples (paragraph [0045]), all of which contained only one film and one nonwoven, and in Figure 1, which shows one nonwoven web bonded to the film.

The specification (paragraph [0029]-[0036]) describes a vacuum lamination process. Page 1, lines 19-23 and page 2, lines 20-24 of provisional application no.60/527898 also disclose vacuum lamination and state that the result is that the nonwoven is bonded to the film thermally and without blending of the polymers used for the film with those of the nonwoven. The disclosure of provisional application no 60/527898 was incorporated by reference into the application at paragraph [0001].

Stretching the vacuum laminate using intermeshing gears to create access areas is disclosed at paragraphs [0040] and [0045]. Page 2, lines 10-16 and lines 25-27 of provisional application 60/527898 disclose that intermeshing gear activation stretches the laminate and creates disturbances in the nonwoven web to expose the film surface. A comparison of Figures 1 and 2 of provisional application 60/527898 clearly shows that after activation (Fig 2), the fibers of the nonwoven web 22 are intact (not broken) but the distance between the fibers has increased considerably, thereby making the nonwoven more porous and exposing the surface of the film 24 in those areas of increased porosity. Page 1, line 24 to page 2, line 3 of provisional application 60/527898 teaches that extensible nonwoven webs are preferred to avoid tearing.

Finally, the specific list of polymers mentioned in the claims is disclosed in paragraph [0023] of the specification.

Accordingly, all features of the claim are fully supported and no new matter is raised.

Election/Restriction

In the final rejection, the Examiner stated that a complete reply must include cancellation of non-elected claims. Applicant disagrees. Applicant has reserved the right to have the method claims re-instated upon allowance of the product claims, provided that the claims are amended to be of the same scope as the allowed product claims. Thus, Applicant submits that it is appropriate for the claims to remain in a withdrawn status.

Claim Rejections

Applicant submits that the rejections set forth in the final Office Action are moot in light of the amended claims, but Applicant will respond to the rejections for the purpose of advancing prosecution.

Claims 41 & 45-47 are rejected under 35 U.S.C. §102(a)/(e) as being unpatentable over Hutson et al., U.S. Pub. No. 2003/0105446 ("Hutson").

Hutson discloses a composite comprising an elastic layer sandwiched with two non-elastic nonwoven materials. Claim 41 is amended to recite that the laminate has only two layers – a nonwoven layer and a formed film layer. Hutson does not suggest using only a single nonwoven. Hutson repeatedly stresses the need for softness and good hand feel on both side of

the elastic laminate. That requires nonwoven webs on each side of the elastic film. Thus, having a nonwoven web on only one side of the film is not an obvious modification of Hutson.

Hutson teaches activation stretching the composite to a point of breaking the fibers in the nonwoven web such that the elasticity of the laminate is substantially that of the film alone. Amended claim 41 recites that the intermeshing gear stretching creates increased porosity of the fibrous web in the stretched areas and without tearing the web. Hutson uses intermeshing gear stretching to stretch and break the nonwoven web in the stretched areas. Breaking the fibers is an important feature of Hutson and is required to obtain a laminate having elasticity substantially equal to that of the elastic film. Accordingly, IMG activating the Hutson laminate without breaking the fibers would be directly contrary to the teachings of Hutson and, thus, not an obvious modification.

Hutson clearly shows in Figure 1 that the broken fibers in the nonwoven are disposed in registration with the apertures. The only disclosure in Hutson that is relevant for the issue of the location of the breaks in the nonwoven and the apertures in the film is the illustration in Figure 1. Applicants have found no disclosure anywhere in Hutson to support any assumption that alignment of the breaks with the apertures illustrated by Hutson in Figure 1 does not necessarily occur, or that it is merely illustrative. Applicant submits that the Examiner's position that Figure 1 of Hutson is only illustrative is thus an unsupported assumption that lacks foundation.

Applicant takes issue with the statement by the Examiner that, because Hutson does not explicitly require registration between apertures and the breaks in the fibrous web, the Examiner is entitled to assume that Figure 1 is merely illustrative. If the Examiner persists in maintaining that reasoning, Applicant respectfully requests that the Examiner provide an appropriate citation of authority.

In addition, Applicant notes that the film of Hutson is apertured. The presence of the aperture means less film material. Less film material means less resistance to stretching. Less resistance to stretching means the film of Hutson is more likely to elongate in the apertured area than in the unapertured area. Thus, a skilled artisan would in fact logically expect the nonwoven to break in the areas corresponding to the apertures first, yielding the results depicted in Figure 1.

Hutson teaches using an elastic film. Claim 41 is amended to recite that the film portion of the laminate is made of a select group of thermoplastic polymers which does not include elastomers. Nothing in Hutson discloses or suggests making the films used in the laminate out of polymers that are not elastomeric. In addition, because the films in Hutson are elastomeric, they can survive the degree of activation needed to cause breakage in the nonwoven webs. A non-elastomeric film, such as ones made from the polymers recited in the claims, would be expected to break at about the same time as the nonwoven webs. It is noted in this regard that Hutson discloses elongations of 700-800%, which is well beyond the elongation that can be tolerated by a typical polyethylene or polypropylene film, for example.

The Examiner interprets the term “extensible” in the claims to mean any material that can be extended to some degree without immediately breaking, regardless of how small or minimal that amount of extension might be. The Examiner states that this is the “broadest reasonable meaning.” Applicants are not aware of any material known in the world that cannot extend to some degree under sufficient tension before breaking. The degree of extension might only be a fraction of a percent, but under the Examiner’s definition, materials like slate, concrete and steel would all be included. Because the Examiner’s interpretation encompasses all known materials, it essentially reads the term “extensible” as meaningless. All claim terms are to be given meaning, so the Examiner’s interpretation is by definition not reasonable.

Moreover, the prior art has given meaning to the term “extensible” when referring to nonwoven webs. See e.g., US 5914084; US 2005/0095943; US 7829487; US 2007/0254545; US 2010/0124864; WO 1990/007602; WO 2003/078717; and WO 2007/140163, for example. None of these prior art references use the term “extensible” in the manner used by the Examiner. These references, however, do establish an accepted meaning in the relevant art which is in conflict with that of the Examiner.

Claims 45-47 are directly or indirectly dependent from claim 41. Thus, these claims are not *prima facie* obvious over Hutson.

Claim 48 is new and recites a laminate comprising a vacuum formed apertured film that is thermally bonded to an extensible nonwoven fibrous web to form a bi-laminate, wherein the extensible nonwoven fibrous web has been incrementally stretched to increase the porosity of the

web without tearing the web in the stretched areas, whereby the surface of the film is exposed in the stretched areas of the fibrous web. Support for claim 48 is found in the same disclosures as set forth above regarding claim 41. Claim 48 is believed to define over the art of record for the same reasons set forth above. In particular, Hutson does not teach or suggest incrementally stretching the fibrous web to increase the porosity of the web without tearing and in fact teaches away from this limitation and instructs the skilled artisan to stretch the laminate to break the nonwoven webs.

Conclusion

For the reasons stated above, claims 41 and 45-48 define patentable subject matter and the references of record do not teach, disclose or suggest the composite recited therein. Reconsideration and withdrawal of all claim objections and claim rejections is solicited, as is a notice of allowance with respect to the claims under prosecution.

Upon the indication of allowable subject matter, Applicant will seek to rejoin the withdrawn claims and amend those claims to conform in scope to the allowed claims.

Respectfully Solicited,

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